



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/646,668	09/20/2000	Patrick Cohen	065691/ 0201	2226

7590

11/06/2002

Foley Lardner  
Washington Harbour  
3000 K Street N W Suite 500  
PO Box 25696  
Washington, DC 20007-8696

EXAMINER

QUAN, ELIZABETH S

ART UNIT

PAPER NUMBER

1743

DATE MAILED: 11/06/2002

5

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/646,668

Applicant(s)

COHEN ET AL.

Examiner

Elizabeth Quan

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 5-18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3,4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

2. The information disclosure statement filed 5/10/2001 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered. Specifically, a copy of the Japanese abstract with document number 1-0114394 was not provided. Examiner is unable to locate the abstract in the databases. Therefore, the abstract has not been considered.

### ***Drawings***

3. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.
4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the discharge triggering means must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Art Unit: 1743

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: (132). The drawings do not adequately show the structural relationship of the elements. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Specification*

6. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

7. The abstract of the disclosure is objected to because it is more than 150 words and contains legal phraseology such as "means" and "comprising." Correction is required. See MPEP § 608.01(b).

8. The disclosure is objected to because of the following informalities: The specification is not organized into Background of the Invention including Field of the Invention and Description of Related Art, Brief Summary of the Invention, Brief Description of the Several Views of the Drawings(s), and Detailed Description of the Invention. Furthermore, the preliminary parts of the specification are written in the format of a claim after a dash.

Appropriate correction is required.

### *Content of Specification*

Art Unit: 1743

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.
- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, Reference to a "Microfiche Appendix": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.

- (e) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
  - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
  - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."
- (f) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it

Art Unit: 1743

should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.

- (g) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (h) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (i) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet (37 CFR 1.52(b)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (j) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (k) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

Art Unit: 1743

9. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

10. The title of the invention is not descriptive. It is not understood what "with a view to implementing" means. A new title is required that is clearly indicative of the invention to which the claims are directed.

### *Claim Objections*

11. Claims 2-4 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claims 2-4 add functional limitations to the elements recited in the apparatus claim 1. Examiner emphasizes that functional limitations are not given patentable weight in apparatus claims. The manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus if the prior art apparatus teaches all the structural limitations of the claim.

12. Claims 5-18 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

### *Claim Rejections - 35 USC § 112*

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Art Unit: 1743

14. Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

15. Referring to claims 1-4, the language “characterized in that” is both awkward and does not positively recite.

16. Referring to claim 1, the preamble appears redundant with “producing a plurality of reaction samples” and “implementing chemical or biological reactions.”

17. Referring to claim 1, the language “in particular a removable plate of the microplate type” is both awkward and does not positively recite.

18. Referring to claim 1, it is unclear what “each cavity exhibiting a volume of the order of a few tens of nanoliters” means. Does the cavity have a volume of a few tens of nanoliters? Is the cavity capable of holding a volume of liquid of a few tens of nanoliters? It is also unclear what few tens of nanoliters means. Does it mean a few tenths of a nanoliters or ten nanoliters?

19. Referring to claim 1, the limitation “able to sample a determined amount of constituent and to deliver drops of volume of the order of a nanoliter” is phrased in an awkward manner. The term determined should probably be replaced by predetermined. Drops of volume cannot be delivered. The phrase “of the order of a nanoliter” should probably be “on the order of a nanoliter.”

20. Referring to claim 1, the terms “means for displacing the piezoelectric micropipette” and “means of relative displacement of the piezoelectric micropipette and of the sample plate” are confusing. The means of relative displacement or bench (101) does not move the micropipette. The confusion is accentuated when claims 3 and 4 recite that the means of relative displacement



Art Unit: 1743

is for moving the removable plate for sample or the piezoelectric micropipette when there already exists a means for displacing the piezoelectric micropipette.

21. Referring to claim 1, does “sample from each filled receptacle of the first and second supply plates, the determined amount” mean a predetermined amount from each receptacle of the supply plates is withdrawn or the total amount from each supply plate deposited into the removable plate for samples?

22. Referring to claim 1, is the sample plate or the means of relative displacement associated with the means for triggering discharge of the micropipette? The drawings do not show the means for triggering discharge of the micropipette.

23. Claim 1 recites the limitation "with means for triggering discharge" in lines 30 and 31 of the claim. There is insufficient antecedent basis for this limitation in the claim.

24. Referring to claim 1, it is unclear what “the latter” refers to. Is the means for triggering discharge of the micropipette” or the micropipette itself?

25. Claims 1-4 recite the limitation "sample plate." There is insufficient antecedent basis for this limitation in the claims.

26. Referring to claim 2, it is unclear what “the relative displacement of the micropipette and sample plate is continuous” means. Does it mean that there are no pauses in either the movement of the micropipette, sample plate, or both? For examining purposes, the limitation has been interpreted as there are no pauses in the movement of either the micropipette, sample plate, or both.

27. Referring to claim 2, it is unclear what “the discharge triggering means are able to trigger discharges of the micropipette at regular time intervals as a function of the constant speed of the

Art Unit: 1743

relative displacement of said micropipette and sample plate” means. For examining purposes, the discharge triggering means triggers discharges of the micropipette at regular time intervals, such as every 3 seconds, while either or both of the micropipette or sample plate is moving at constant speed.

28. Referring to claim 2, it is unclear what “independently of the presence or otherwise of a cavity of the sample plate in line with said micropipette” means or refers to. Does it refer to the relative displacement or the trigger discharges of the discharge triggering means? What is the purpose of this limitation in the claim? Does it not matter whether or not the drop makes it into the cavity? Maybe the presence of the cavity is not significant?

29. Referring to claim 3, it appears the claim is merely defining what the means of relative displacement is. What does along an “axis X parallel to the rows” mean? Does it mean any axis parallel to the rows or x-axis? Similarly, what does along an “axis Y parallel to the columns” mean? The terms rows, x-axis, columns, and y-axis are relative. Claim 4 has the same problem with the exception of the plural form of axis is used.

30. Referring to claim 3, “wherein” or “while” should be inserted before “the piezoelectric micropipette” in the 7<sup>th</sup> line.

31. Referring to claims 1-4, Applicant has not defined the first supply plate, second plate, and removable plate for samples over each other. Applicant has not defined constituent over sample.

32. Referring to claim 2, it is unclear whether there is unsupported matter in the claim or that it is recited in a way that it is confusing.

Art Unit: 1743

33. The claims are generally narrative and indefinite, failing to conform to current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

***Claim Rejections - 35 USC § 102***

34. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

35. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 97/44134 to Gamble et al.

Referring to claims 1-4, Gamble et al. disclose an automatic device for forming a microarray of samples in a liquid medium (see ABSTRACT; FIG. 10). Removable first and second supply plates (302) comprise N and M receptacles, respectively, for containing a constituent (see FIG. 10; PAGE 6; PAGE 14, lines 26-29). A removable plate for samples either from a bin in a rack (302) or mounted on a platform (337) has a plurality of cavities arranged in array of at least N rows and at least M columns (see FIG. 10; PAGE 6; PAGE 14, lines 26-29). Since a sample volume of 10-100 microliters may be added to each receptacle, each cavity is capable of holding a smaller volume of sample, such as a few nanoliters, few tenths of a nanoliter, or ten nanoliters (see PAGE 16, lines 30 and 31). A piezoelectric micropipette (312) is able to deliver nanoliter amounts of samples (see PAGE 2, lines 11 and 12; PAGE 4; PAGE 5; PAGE 15, lines 2-22; PAGE 16, lines 30 and 31). The micropipette (312) can transfer samples of a

predetermined amount from each of the filled receptacles of the first and second supply plates along at least two perpendicular axes Y and Z by a means for displacing the micropipette (see FIG. 10; PAGE 15, lines 2-22). A means of relative displacement with respect to the micropipette (312) and removable plate for samples (302) or (337) are associated with a means for triggering the discharge of the micropipette (312) such that at least one drop of constituent is delivered into each cavity of the removable plate for samples (see FIG. 10; PAGE 14, lines 26-32; PAGES 15-19). The relative displacement with respect to the micropipette (312) and removable plate for samples (302) or (337) is continuous and the means for triggering discharges are able to trigger the discharges of the micropipette (312) at regular time intervals as a function of the constant speed of the relative displacement of the micropipette (312) and removable plate for samples (302) or (337) (see PAGE 15, lines 23-32; PAGES 16-19). There are conveyor means for advancing the first and second supply plates and removable plate for samples (302) along the x-axis while the micropipette (312) may remain stationary (see FIG. 10; PAGE 14, lines 26-32; PAGE 15, lines 1-7). The removable plate for samples (337) may be moved by motor (340) while the micropipette (312) may remain stationary (see FIG. 10; PAGE 15, lines 20-22). The removable plate for samples (337) may be stationary while the micropipette (312) advances along x- and/or y- axes (see FIG. 10; PAGE 14, lines 26-32; PAGES 15-19). Therefore, Gamble et al. includes all the limitations in claims 1-4.

36. Claims 1, 2, and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 97/44134 to Gamble et al.

Referring to claims 1, 2, and 4, Gamble et al. disclose an automatic device (100) for forming a microarray of samples in a liquid medium (see ABSTRACT; FIG. 6). Removable first and second supply plates (110) comprise N and M receptacles, respectively, for containing a constituent (see FIG. 6; PAGE 6; PAGE 12, lines 7-32; PAGE 13, lines 1-8). A removable plate for samples (110) has a plurality of cavities arranged in array of at least N rows and at least M columns (see FIG. 6; PAGE 6; PAGE 12, lines 7-32; PAGE 13, lines 1-8). Since a sample volume of 10-100 microliters may be added to each receptacle, each cavity is capable of holding a smaller volume of sample, such as a few nanoliters, few tenths of a nanoliter, or ten nanoliters (see PAGE 16, lines 30 and 31). A piezoelectric micropipette (108) is able to deliver nanoliter amounts of samples (see PAGE 2, lines 11 and 12; PAGE 4; PAGE 5; PAGE 12, lines 7-32; PAGE 13, lines 1-8; PAGE 16, lines 30 and 31). The micropipette (108) can transfer samples of a predetermined amount from each of the filled receptacles of the first and second supply plates along at least two perpendicular axes Y and Z by a means for displacing the micropipette (see FIG. 6; PAGE 12, lines 7-32; PAGE 13, lines 1-8). A means of relative displacement with respect to the micropipette (108) and removable plate for samples (110) are associated with a means for triggering the discharge of the micropipette (108) such that at least one drop of constituent is delivered into each cavity of the removable plate for samples (see FIG. 6; PAGE 12, lines 7-32; PAGE 13, lines 1-8). The relative displacement with respect to the micropipette (108) and removable plate for samples (110) is continuous and the means for triggering discharges are able to trigger the discharges of the micropipette (108) at regular time intervals as a function of the

Art Unit: 1743

constant speed of the relative displacement of the micropipette (312) and removable plate for samples (110) (see PAGE 12, lines 7-32; PAGE 13, lines 1-8). The removable plate for samples (337) may be stationary while the micropipette (312) advances along x- and/or y- axes (see FIG. 6; PAGE 12, lines 7-32; PAGE 13, lines 1-8). Therefore, Gamble et al. includes all the limitations in claims 1, 2, and 4.

37. Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 97/44134 to Gamble et al.

Referring to claims 1-3, Gamble et al. disclose an automatic device for forming a microarray of samples in a liquid medium (see ABSTRACT; FIG. 7). Removable first and second supply plates on rotating substrate device (150) comprise N and M receptacles, respectively, for containing a constituent (see FIG. 7; PAGE 6; PAGE 13, lines 9-32; PAGE 14, lines 1 and 2). A removable plate for samples on rotating substrate device (150) has a plurality of cavities arranged in array of at least N rows and at least M columns (see FIG. 7; PAGE 6; PAGE 13, lines 9-32; PAGE 14, lines 1 and 2). Since a sample volume of 10-100 microliters may be added to each receptacle, each cavity is capable of holding a smaller volume of sample, such as a few nanoliters, few tenths of a nanoliter, or ten nanoliters (see PAGE 16, lines 30 and 31). A piezoelectric micropipette (164) is able to deliver nanoliter amounts of samples (see PAGE 2, lines 11 and 12; PAGE 4; PAGE 5; PAGE 13, lines 9-32; PAGE 14, lines 1 and 2; PAGE 16, lines 30 and 31). The micropipette (164) can transfer samples of a predetermined amount from each of the filled receptacles of the first and second supply plates along at least two perpendicular axes Y and Z by a means for displacing the micropipette (see FIG. 7;

Art Unit: 1743

PAGE 13, lines 9-32; PAGE 14, lines 1 and 2). A means of relative displacement with respect to the micropipette (164) and removable plate for samples (110) are associated with a means for triggering the discharge of the micropipette (164) such that at least one drop of constituent is delivered into each cavity of the removable plate for samples (see FIG. 7; PAGE 13, lines 9-32; PAGE 14, lines 1 and 2). The relative displacement with respect to the micropipette (164) and removable plate for samples (110) is continuous and the means for triggering discharges are able to trigger the discharges of the micropipette (164) at regular time intervals as a function of the constant speed of the relative displacement of the micropipette (164) and removable plate for samples (110) (see PAGE 13, lines 9-32; PAGE 14, lines 1 and 2; PAGE 15, lines 23-32; PAGES 16-19). There are conveyor means for advancing the first and second supply plates and removable plate for samples (110) along the x-axis while the micropipette (164) may remain stationary (see FIG. 7; PAGE 13, lines 9-32; PAGE 14, lines 1 and 2). The removable plate for samples (110) may be moved while the micropipette (312) may remain stationary (see FIG. 7; PAGE 13, lines 9-32; PAGE 14, lines 1 and 2). Therefore, Gamble et al. includes all the limitations in claims 1-3.

***Claim Rejections - 35 USC § 103***

38. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1743

39. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

40. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

41. Alternatively, claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 97/44134 to Gamble et al. in view of U.S. Patent No. 6,083,763 to Balch.

Referring to claims 1-4, while Applicant has not defined the first and second supply plates over the removable plate for samples and claim the invention as disclosed in the drawings and specification, Gamble et al. do not explicitly disclose withdrawing fluids from the receptacles of each of the first and second supply plates and dispensing the fluids into a removable plate for samples. Balch shows the capillary tubes in fluid communication with the storage vessels of two plates providing the fluids for the reaction vessels. Balch does not explain the significance of the configuration and the method;



Art Unit: 1743

however, the absence of the explanation proves the non-criticality of the configuration of two supply plates, which may be used as necessary to provide two different types of reagents. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Gamble et al. to provide to supply plates with the reagents or samples for the removable plate for samples as in Balch as necessary or desired to accommodate the number of reagents or samples, which may be two or even more.

### *Conclusion*

42. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art includes one or more limitations in the claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth Quan whose telephone number is (703) 305-1947. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on (703) 308-4037. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 879-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Elizabeth Quan  
Examiner  
Art Unit 1743

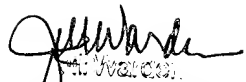
Application/Control Number: 09/646,668

Page 17

Art Unit: 1743

eq

November 3, 2002

  
J. Howard  
Supervisory Patent Examiner  
Technology Center 1700